

REMARKS

The application has been carefully reviewed in light of the Office Action dated September 28, 2004. Claims 1 and 24 have been amended. Claims 1-31 remain pending in this case.

Rejection under 35 U.S.C. § 102

Claims 1, 4-7, 9-11, 14-27, 30 and 31 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Leinwand et al. (U.S. Patent No. 6,130,890). Applicants respectfully traverse the rejection and request reconsideration.

Amended claim 1 recites a method for routing network traffic comprising *inter alia* obtaining geographic information on one of a source or the destination associated with the network traffic from a map of the network, the map being produced as a result of deriving a geographic location of any intermediate hosts contained within the route through the network; using a particular IP address associated with each intermediate host; analyzing the route and the geographic locations of any intermediate hosts; using the particular IP address associated with each intermediate host; and determining the geographic location of the source or destination and using the particular IP address associated with the source or destination.

Amended claim 24 recites a method for routing network traffic comprising *inter alia* obtaining intelligence on the network from a map of the network, the map being produced as a result of determining at least one route through the network which includes the destination, using a particular IP address associated with the destination; identifying any intermediate hosts contained within the route between a source of the network traffic and the destination; using a particular IP address associated with the source, the particular IP address associated with the destination and a particular IP address associated with each intermediate host; and analyzing

interconnections between nodes in the network, using the particular IP address associated with each node.

Leinwand discloses a method and system for determining a route for a packet traveling over at least one system from a source to a destination. According to Leinwand, a method and system is provided for

determining a route for a packet traveling over at least one system from a source to a destination. A first geographic area corresponds to the source and a second geographic area corresponds to the destination. The destination further has an address which does not correspond to the second geographic area. In this aspect, the method and system comprise associating an address for the destination with the second geographic area to allow selection of the route for the data packet based on the second geographic area.

See, Leinwand column 3, lines 9-18.

Leinwand fails to teach or suggest the following elements of claim 1:

- deriving a geographic location of any intermediate hosts contained within the route through the network, using a particular IP address associated with each intermediate host;
- analyzing the route and the geographic locations of any intermediate hosts using the particular IP address associated with each intermediate host; and
- determining the geographic location of the source or destination, using the particular IP address associated with the source or destination.

Leinwand also fails to teach or suggest the following elements of claim 24:

- determining at least one route through the network which includes the destination, using a particular IP address associated with the destination;
- identifying any intermediate hosts contained within the route between a source of the network traffic and the destination, using a particular IP address associated with the source, the particular IP address associated with the destination and a particular IP address associated with each intermediate host; and
- analyzing interconnections between nodes in the network, using the particular IP address associated with each node.

To the contrary, Leinwand discloses identifying data packets between different locations using a plurality of autonomous systems. See, Leinwand, column 4, lines 50-54. Thus, Leinwand fails to provide the fine level of routing control as that of claims 1 and 24 because Leinwand only has the ability to determine the location of a source or destination on a state or regional level for a range of IP addresses, not an individual IP address. “There is no geographic correlation between the destination address and the physical location(s) associated with the AS assigned the destination address. IP addresses may come in clusters because a range of IP addresses may be assigned to the same AS. For example, an AS in Japan might be assigned the IP address range of 202.123.4.0 through 202.123.7.255. However, no convention specifies that all IP addresses of a particular range will be in an AS associated with a specific country or other geographic region.” See, Leinwand column 2, lines 35-44. Accordingly, the rejection of claims 1 and 24 should be withdrawn.

Claims 4-7, 9-11, 14-23 depend from claim 1 and claims 25-27, 30 and 31 depend from claim 24, and are allowable along with claims 1 and 24 respectively, for at least the reason that they depend from allowable independent claims 1 and 24.

Rejection under 35 U.S.C. § 103

Claims 2 and 3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Leinwand and Zhang et al. (U.S. Patent No. 6,324,585). Also, claims 8, 12, 13, 28 and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Leinwand and Burke et al. (U.S. Patent No. 5,231,631). Applicants respectfully traverse the rejection and request reconsideration.

The Office Action fails to establish a *prima facie* case of obviousness of the subject matter of claims 1-31. Courts have generally recognized that a showing of a *prima facie* case of obviousness necessitates three requirements: (i) some suggestion or motivation, either in the references themselves or in the knowledge of a person of ordinary skill in art, to modify the reference or combine the references teachings; (ii) a reasonable expectation of success; and (iii) the prior art references must teach or suggest all claim limitations. See e.g., In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998); Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573 (Fed. Cir. 1996). The references used in the Office Action fail at least the third prong of obviousness in that the combination of cited references fails to teach or suggest all claim limitations.

In the present case, as mentioned above, Leinwand fails to teach or suggest the subject matter of claims 1 and 24. In addition, as mentioned in the Office Action, Leinwand fails to teach or suggest the use of a domain name server inquiry or the selection of a route based on bandwidth. In order to overcome these deficiencies in Leinwand, the Office Action relies on Zhang and Burke.

However, Zhang and Burke fail to remedy the deficiencies of Leinwand. Specifically, Zhang merely discloses a method and apparatus for resolving a domain name service request in a system where it is possible for the user to connect to more than one network at a time. See, Zhang, Abstract. Burke merely discloses that “whenever a first terminal wishes to transmit a data message to a second terminal, the source adapter, connected to the first terminal, allocates

transmit bandwidth for the transmission of the message and sends a request message to a destination adapter, connected to the second terminal, for checking availability of and allocating receive bandwidth. The data message is sent only if bandwidth has been allocated on both ends. Overflow traffic is throttled at the adapters before it enters the network, thereby reducing the number of data cells lost because of the limited storage of the network.” See, Burke, Abstract.

Neither Zhang nor Burke teach or suggest the following limitations of claim 1:

- deriving a geographic location of any intermediate hosts contained within the route through the network, using a particular IP address associated with each intermediate host;
- analyzing the route and the geographic locations of any intermediate hosts, using the particular IP address associated with each intermediate host; and
- determining the geographic location of the source or destination, using the particular IP address associated with the source or destination.

Similarly, Zhang and Burke also fail to teach or suggest the following limitations of claim 24:

- determining at least one route through the network which includes the destination, using a particular IP address associated with the destination;
- identifying any intermediate hosts contained within the route between a source of the network traffic and the destination, using a particular IP address associated with the source, the particular IP address associated with the destination and a particular IP address associated with each intermediate host; and
- analyzing interconnections between nodes in the network, using the particular IP address associated with each node.

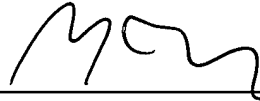
Thus, the combination of Leinwand and Zhang fails to teach or suggest all the limitations of claims 1 and 24. In addition, the combination of Leinwand and Burke fails to teach or suggest all the limitations of claims 1 and 24. Accordingly, claims 1 and 24 are allowable over the combination of Leinwand and Zhang, and the combination of Leinwand and Burke. Claims 2, 3,

8, 12 and 13 depend from claim 1, and claims 28 and 29 depend from claim 24, and are thus all allowable for at least the reason that they depend from allowable independent claims 1 and 24.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. No additional fee is believed due. However, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

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Gregory J. Kirsch

17 DEC 2004

Date